# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 89 - 118

NPDES PERMIT NO. CA0037494

WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF PACIFICA, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

- 1. The City of Pacifica (hereinafter called the Discharger), submitted a report of waste discharge dated January 10, 1989, for reissuance of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).
- 2. The City of Pacifica owns and operates a wastewater treatment plant which provides secondary treatment of domestic wastewater from the City of Pacifica. The treatment plant has a dry weather treatment capacity of 3.3 million gallons per day (MGD), and presently discharges an average dry weather flow of 2.8 MGD (1988 flow data). Treated effluent from the plant is discharged into the Pacific Ocean, a water of the State and of the United States. Effluent is discharged west of the Pacifica municipal fishing pier, through a submerged, 30-inch diameter outfall pipe terminating in a 313-foot long, multiport diffuser with a diameter ranging from 30 inches to 18 inches, and ending 2,670 feet offshore. Effluent is discharged at a depth of 30.8 feet below mean lower low water, through diffuser ports on risers which are approximately 9.8 feet above the ocean floor. The coordinates of the outfall are 37 degrees, 37 minutes, 55 seconds North Latitude, and 122 degrees, 30 minutes, 30 seconds West Longitude.
- 3. The discharge is presently governed by Waste Discharge Requirements prescribed in Order No. 84-33, adopted by the Board on June 20, 1984, which allow discharge into the Pacific Ocean. Previously adopted Waste Discharge Requirement Order Nos. 74-166, 79-23, and 79-111 are currently also in effect, until Cease and Desist Order No. 76-101 and amending Order no. 78-31 are rescinded.
- 4. Wastewater is conveyed to the treatment plant by gravity from the area north of the plant, and from the area south of the plant via a force main, which originates at the Linda Mar pump station, about three miles south of the plant. A bulk lime feeder located at the Linda Mar pump station is used to elevate the pH of the wastewater in the force main in order to control odors at the plant headworks and reduce corrosion of the steel forcemain pipe.

- 5. The treatment process presently consists of the following unit processes: comminution, grit removal, primary sedimentation (two basins), activated sludge aeration, secondary clarification (two rectangular, travelling-bridge clarifiers), disinfection with chlorine (three contact tanks, in series), dechlorination with sulfur dioxide, and effluent pumping to the outfall.
- 6. Sludge from the primary sedimentation basins is pumped to one of two anaerobic digestors. Scum from the primary basins is collected in troughs, pumped to an above-ground, insulated and heated storage tank, and then pumped into the digestors via the sludge mixing system. Waste activated sludge, and scum from the secondary clarifiers are pumped to dissolved air floatation thickeners, and the thickened sludge is then pumped to the anaerobic digestors. Stabilized sludge from the digestors is dewatered by centrifuges, and hauled away for land disposal at an authorized site.
- 7. The treatment plant has a limited ability to handle peak and sustained wet weather flows, with the following reported capacities and operational limitations. The primary system has a hydraulic capacity of 8 to 10 MGD under normal, automatic operational conditions and, under manual operations, a maximum capacity of 25 MGD. The secondary tanks have a peak hydraulic capacity of 6 to 7 MGD, and sustained peak capacity of 4 to 5 MGD (sustained flows being those greater than 4 MGD for more than 48 hours).

Peak flows in excess of 6 MGD are automatically bypassed around the secondary system, and mixed with the secondary effluent at the chlorine contact basins prior to the effluent pumping to the outfall. If sustained flows occur, threatening wash-out of secondary system solids, the secondary flow restriction valve is throttled, restricting flows to the secondary tanks, with the excess flow being bypassed to the chlorine contact tanks and effluent pumps, as occurs with the automatic bypassing. Automatic bypassing of the secondary system occurs for flows up to 9 MGD.

Flows above 9 MGD will cause the flow to backup in the primary tanks, submerging the primary effluent wiers and washing out the scum blanket. In order to prevent this, the wet weather flow control valve is manually opened to allow flows above 9 MGD to pass through a wet weather flow meter and on to the effluent pump wet well.

8. The State Water Resources Control Board adopted a revised Water Quality Control Plan for Ocean Waters of California (California Ocean Plan) on September 22, 1988. The Ocean Plan contains a listing of beneficial uses and water quality objectives for the ocean waters of the State.

- 9. The beneficial uses of ocean waters of the State identified in the Ocean Plan include:
  - a. Water Contact and Non-Contact Recreation
  - b. Commercial and Sport Fishing
  - c. Shellfish Harvesting
  - d. Mariculture
  - e. Preservation and Enhancement of Areas of Special Biological Significance
  - f. Preservation of Rare and Endangered Species
  - q. Marine Habitat
  - h. Fish Spawning and Migration
  - i. Navigation
  - j. Industrial Service Supply
- 10. An Operation and Maintenance Manual is maintained by the Discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, recommended operation strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, the manual should be kept updated to reflect significant changes in treatment facilities or operational procedures.
- 11. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (California Environmental Quality Act) pursuant to Section 13389 of the California Water Code.
- 12. The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity for a public hearing and the opportunity to submit their written views and recommendations.
- 13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the City of Pacifica (Discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

#### A. Discharge Prohibitions

- 1. The bypass or overflow of untreated or partially treated wastewater to waters of the State, either at the treatment plant or from the collection system or pump stations tributary to the treatment plant is prohibited.
- 2. The average dry weather flow shall not exceed 3.3 million gallons per day. Average dry weather flow shall be determined over three consecutive dry weather months each year.

- 3. The discharge of wastewater effluent to the ocean, other than through the deepwater outfall as described in this Order, and in any manner which does not provide sufficient initial dilution to minimize concentrations of substances not removed in the treatment process, is prohibited.
- 4. The discharge of wastewater effluent at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.
- 5. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or into a waste stream that discharges to the ocean without further treatment is prohibited.
- 6. The treatment, disposal, storage, or processing of sewage sludge or other solids removed from the wastewater stream shall not cause a pollution or nuisance as defined in Section 13050(1) and (m) of the California Water Code.

#### B. Effluent Limitations

1. Effluent discharged to the Pacific Ocean shall not exceed the following limits:

|          | Constituent                                      | <u>Units</u> | Monthly<br>Average | Weekly<br>Average | Daily<br>Maximum | Instan-<br>taneous<br>Maximum |
|----------|--|--------------|--------------------|-------------------|------------------|-------------------------------|
| a.<br>b. | Carbonaceous BOD <sub>5</sub><br>Total Suspended | mg/l         | 25                 | 40                | 50               |                               |
|          | Solids   | mg/l         | 30                 | 45                | 60               |                               |
| c.       | Oil and Grease                                   | mg/1         | 10                 |                   | 20               |                               |
|          | Settleable Matter                                | ml/1-hr      | 0.1                |                   |                  | 0.2                           |
|          | Turbidity Total Chlorine                         | NTU          | 75                 | 100               | 225              | binks brogg                   |
|          | Residual (1)                                     | mg/l         |                    |                   |                  | 0.0                           |
| g.       | Toxicity Concentration (2)                       | tu           | 1.5                | 2.0               | 2.5              |                               |

- (1) Requirement defined as below the limit of detection in standard test methods.
- (2) Toxicity Concentration (tu) =  $\frac{100}{96-\text{hour LC50}}$

When it is not possible to determine the 96-hour LC50 from the bioassay test results, the toxicity concentration shall be calculated by the following:

Toxicity Concentration (tu) =  $\frac{\log (100 - s)}{1.7}$ 

where S = percent survival in 100 % wastewater. If S  $\geq$  99, Tc shall be reported as zero.

- 2. The arithmetic mean of the carbonaceous biochemical oxygen demand (five-day, 20°C) and suspended solids values, by weight for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85 percent removal).
- 3. The pH of the discharge shall not exceed 9.0 nor be less than 6.0.
- 4. Representative samples of the effluent shall not exceed the following limits:

|                | Constituent  | Units                                    | 6-Month<br>Median                                      | Daily<br>Maximum  | Instan-<br>taneous<br>Maximum |
|----------------|--|--|--|---|-------------------------------|
| a.<br>b.<br>c. |  |  | 0.01<br>0.02<br>0.005                                  | 0.04<br>0.08<br>0.02  | 0.1<br>0.2<br>0.05            |
| d.<br>e.<br>f. |  | mg/l<br>mg/l<br>mg/l                     | 0.1  | 0.8<br>0.4<br>0.004   | 2.0<br>1.0<br>0.010           |
| g.<br>h.<br>j. | Silver<br>Zinc   | mg/l<br>mg/l<br>mg/l<br>mg/l             | 0.1<br>0.02<br>0.3<br>0.1                              | 0.4<br>0.08<br>1.2<br>0.4   | 1.0<br>0.2<br>3.0<br>1.0      |
|                | Ammonia (expressed as nitrogen) Phenolic Compounds (non-chlorinated) | mg/l                                     | 40   | 160   | 400<br>5.0                    |
| m.             | Chlorinated Phenolics  | mg/l                                     |  | 0.37  | 0.93                          |
|                | Aldrin & Dieldrin (2<br>Chlordane and Related                        |  | 0.19   | 0.37  | 0.56                          |
|                | Compounds (2) DDT & Derivatives (2) Endrin (2)                       | ,  | 0.28<br>0.09<br>0.19                                   | 0.56<br>0.19<br>0.37  | 0.84<br>0.28<br>0.56          |
| s.<br>t.       |  | ug/l<br>Not to e<br>Title 17<br>Group 3, | 0.28<br>0.65<br>exceed lim:<br>7, Chapter<br>Article 3 | 0.74<br>0.56<br>1.3<br>its specifi<br>5, Subshap<br>3, Section<br>ministrativ | oter 4,<br>30269 of           |

- (1) The Discharger may at its option meet this limit as total chromium.
- (2) These limits are based on Ocean Plan criteria, using a minimum initial dilution value of 92:1.

5. If the Discharger elects to document compliance with the coliform receiving water limitations exclusively in the effluent, and so notifies the Board, in writing, the receiving water coliform monitoring may be replaced with effluent coliform monitoring, and the following effluent limitations will apply:

The moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five consecutive effluent samples shall not exceed 2400 MPN per 100 milliliters (2400 MPN/100 ml).

Any single sample shall not exceed 24,000 MPN/100 ml.

#### C. Receiving Water Limitations

- 1. Floating particulates and grease and oil shall not be visible.
- 2. The discharge of waste shall not cause esthetically undesireable discoloration of the ocean surface.
- 3. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
- 4. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
- 5. The dissolved oxygen concentration shall not at any time be depressed more than ten percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
- 6. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- 7. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- 8. The concentration of substances set forth in Chapter IV, Table B of the Water Quality Control Plan for Ocean Waters of California, dated September 22, 1988, in marine sediments shall not be increased to levels which would degrade indigenous biota.
- 9. The concentration of organic materials in marine sediments shall not be increased to levels which would degrade marine life.
- 10. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

- 11. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- 12. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
- 13. The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
- 14. The following bacteriological limits shall not be exceeded throughout the water column, (a) within a zone bounded by the shoreline and either the 30-foot depth contour, or a distance of 1,000 feet from the shoreline, whichever is greater; and (b) in areas outside this zone used for body contact recreation:

| Parameter Applicable<br>to any 30-day period | Total Coliform<br>Organisms<br>(MPN/100 ml) | Fecal Coliform Organisms (MPN/100 ml) |
|--|---|---------------------------------------|
| Maximum * 80% of Samples                     | 10,000<br>1,000                             |                                       |
| Log Mean<br>90% of Samples **                | 400 000 000<br>**************************** | 200<br>400                            |

- \* Verified by repeat sample taken within 48 hours.
- \*\* Applicable to any 60-day period.
- 15. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

#### D. Provisions

- 1. Requirements prescribed by this Order supersede the requirements prescribed by Order No. 84-33. Order No. 84-33 is hereby rescinded.
- 2. This Order does not revoke Order Nos. 74-166, 79-23, or 79-111. These Orders shall remain in full force and effect until Cease and Desist Order No. 76-101 and amending Order No. 78-31 are rescinded.
- 3. The Discharger shall comply with all sections of this Order immediately upon adoption.

- 4. The Discharger shall comply with the attached Self-Monitoring Program. The Board's Executive Officer may make minor amendments to this Self-Monitoring Program pursuant to federal regulations (40 CFR 122.63).
- 5. The Discharger shall comply with all applicable items of the attached "Standard Provisions and Reporting Requirements" dated December, 1986.
- 6. Where concentration limitations in mg/l or ug/l are contained in this Permit, the following Mass Emission Limitations shall also apply:

(Mass Emission Limit in lbs/day) = (Concentration Limit in mg/l) x (8.34) x (Actual Flow in million gallons per day averaged over the time interval to which the limit applies).

- 7. Compliance with Effluent Limitation B.l.g. shall be determined using 96-hour fish bioassays, using 24-hour composite samples of the discharged effluent, and one of the following test species: three-spine stickleback, rainbow trout or fathead minnow.
- 8. The Discharger shall review and update its Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Regional Board by April 15 of each year.
- 9. The Discharger shall review and update by April 15, annually, its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
- 10. This Order expires July 19, 1994. The Discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
- 11. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objections. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on July 19, 1989.

STEVEN R. RITCHIE Executive Officer

#### Attachments:

Standard Provisions and Reporting Requirements, December 1986 Self-Monitoring Program Resolution No. 74-10

[File No. 2179.7022] [Originator/BDA] [Reviewer/RJC]

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

#### SELF-MONITORING PROGRAM

FOR

| CITY OF PACIFICA           |
|----------------------------|
| SAN MATEO COUNTY           |
|                            |
| ORDER NO. 89 - 118         |
| NPDES PERMIT NO. CA0037494 |

CONSISTS OF

PART A, dated December 1986

AND

PART B

# PART B

# (CITY OF PACIFICA SELF-MONITORING PROGRAM)

# I. DESCRIPTION OF SAMPLING STATIONS

# A. <u>INFLUENT</u>

| Station | Description  |
|---------|--|
| A-001   | At any point in the treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment, and exclusive of any return flows or process sidestreams. |

# B. EFFLUENT

| Station | <u>Description</u>   |
|---------|--|
| E-001   | At any point in the treatment facilities between the point of discharge and the point at which all waste tributary to the outfall is present (May be same as E-001-D). |
| E-001-D | At any point in the treatment facilities at which point adequate contact with the disinfectant is assured.   |

# C. RECEIVING WATERS

| <u>Station</u> | Description   |
|----------------|---|
| C-1            | At the shoreline, 500 feet north of the outfall line.                                     |
| C-2            | At the shoreline, 1000 feet north of the outfall line.                                    |
| C-3            | At the shoreline, 500 feet south of the outfall line.                                     |
| C-4            | At the shoreline, 1000 feet south of the outfall line.                                    |
| C-5            | At a point 1000 to 2000 feet offshore, 1000 feet north and perpendicular to the diffuser. |
| C-6            | At a point 1000 to 2000 feet offshore, 1500 feet north and perpendicular to the diffuser. |

| C-7  | At a point located in the center of the waste plume.                                      |
|------|---|
| C-8  | At a point 1000 to 2000 feet offshore, 1000 feet south and perpendicular to the diffuser. |
| C-9  | At a point 1000 to 2000 feet offshore, 1500 feet south and perpendicular to the diffuser. |
| C-10 | At the end of the municipal pier in line with the outfall                                 |

# D. LAND OBSERVATIONS

| Station                 | Description   |
|-------------------------|---|
| P-1<br>through<br>P-'n' | Points located along the perimeter of the wastewater treatment facilities, at equidistant intervals not to exceed 500 feet. |

NOTE: A sketch showing the locations of these stations shall accompany each monthly report and the Annual report for each calendar year.

#### E. OVERFLOWS AND BYPASSES

| Station                   | Description  |
|---------------------------|--|
| OV-1<br>through<br>OV-'n' | At points in the collection system including manholes, pump stations, or any other location where overflows or bypasses occur. |

- NOTES: 1. A map and description of each known overflow or bypass location shall accompany the Annual report for each calendar year.
  - 2. Each occurrence of an overflow or bypass shall be reported to the Regional Board in accordance with the reporting requirements specified in Sections G.1 and G.2. of Part A.

# II. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

The schedule of sampling, measurements and analysis shall be that given as Table I (and Table I Footnotes).

#### III. MODIFICATIONS TO PART A

- A. This monitoring program does not include the following sections of Part A: D.5., and E.4.
- B. Paragraph C.5. of Part A is revised to read:

Average weekly and monthly values are calculated as the sum of all daily discharge values measured during the specified period (calendar week or calendar month), divided by the number of daily discharge values measured during that specified period.

#### IV. REPORTING REQUIREMENTS

- A. Self-Monitoring Reports for each calendar month shall be submitted monthly, to be received no later than the 15th day of the following month. The required contents of these reports are specified in Section G.4. of Part A.
- B. An annual report covering the previous calendar year shall be submitted to the Regional Board by January 30 of each year. The required contents of the annual report are specified in section G.5. of Part A.
- C. Any overflow, bypass or other significant non-compliance incident that may endanger health or the environment shall be reported according to sections G.1 and G.2. of Part A.
- I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:
- 1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89 - 118.
- 2. Is effective on the date shown below.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

STEVEN R. RITCHIE Executive Officer

Effective Date 7/19/89

Attachment: Table I with footnotes

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS (1) All Sec. Trt. AII All E-0,01-D P Sta OV Sta C Sta Bypass E-001 A-001 Sampling Station Cont C-24 0 0 C-24 Cont G C-24 G TYPE OF SAMPLE D D Flow Rate (mgd) CBOD (5-day 20 C) (mg/1 & kg/day) Chlorine Residual & Dos-3/W 2/W 2H orCont 2H , or Cont age (mg/l & kg/day) Settleable Matter (ml/l-hr. & cu. ft./day) D Total Suspened Matter (mg/1 & kg/day) D 2/W Oil and Grease (mg/l & kg/day) 2/M 2/M 2W(3) Coliform (Total or Fecal) (MPN/100 ml) per reg't (3) Fish Tox'y 96-hr. IC50 or 8 Surv'l in undiluted waste 5/W (4)À (5) **M** Ammonia Nitrogen (mg/1)Nitrate Nitrogen (mg/1 & kg/day)Nitrite Nitrogen (mg/l & kg/day) Total Organic Nitrogen (mg/l & kg/day) Total Phosphate (mg/l & kg/day) Turbidity D (NTU) (5) pН D (units) M(5) Dissolved Oxygen D (mg/l and % Saturation)  $M^{(5)}$ Temperature D (°C) Salinity (ppt) Secchi Disc (inches) Sulfides (if DO<2.0 mg/l) D Total & Dissolved (mg/l) Arsenic (6)(mg/l & kg/day) Cadmium (6)Μ (mg/l & kg/day) Chromium, Total (mg/l & kg/day) (6)Copper (6)Μ (mg/l & kg/day) Cyanide (6) Μ (mg/1 & kg/day)

Μ

М

Silver

Lead

(mg/1 & kg/day)

(mg/l & kg/day)

(6)

(6)

|   |         |                |       | TABI  | ΕĪ   | (cont.   | inued) |               |          |                |          |          |
|---|---------|----------------|-------|-------|------|----------|--------|---------------|----------|----------------|----------|----------|
| SCHE  | OULE FO | r <b>Sam</b> i | PLING | MEAS  | UREM | ENIS,    | AND A  | NALYSIS       | (1)      |                |          |          |
| Sampling Station  | A-001   |                | E-00, | 1     |      |          | ALL    | All<br>OV Sta | WT7      | Misc.<br>Obsv. |          |          |
| TYPE OF SAMPLE  | C-24    | G              | C-24  | Cont  | G    | C-24     | 0      | 0             | 0        | 0              |          |          |
| Mercury   |         |                | M     |       |      |          |        |               |          |                |          |          |
| Nickel (6)  |         |                | М     |       |      |          |        |               |          |                |          |          |
| (mg/1 & kg/day)   |         |                | М     |       |      |          |        |               |          |                |          |          |
| (mg/l & kg/day) (6) Phenolic Comp. (non-chlor                 | )       |                |       |       |      |          |        |               |          |                |          |          |
| (mg/l & kg/day) (6  | }       |                | M     |       |      |          |        |               |          |                |          |          |
| Standard Observations Daily Rainfall                          |         | D              |       |       |      |          | 2/W    | E             | M        |                |          | •        |
|   |         |                |       |       |      | <u> </u> |        |               |          | (7)            |          |          |
| Dewatered Sludge  |         |                |       |       |      |          |        |               |          | D `            |          | _        |
| Chlorinated Phenolics<br>(mg/l & kg/day) (6)                  |         |                | 2/y   |       |      |          |        |               |          |                |          | <u> </u> |
| Aldrin and Dieldrin   |         |                | 2/y   |       |      |          |        |               |          |                |          | <u> </u> |
| (mg/1 & kg/day) Chlordane & Related Comp. (mg/1 & kg/day) (6) |         |                | 2/y   |       |      |          |        |               |          |                |          |          |
| (mg/l & kg/day) (6) DDT and Derivatives (mg/l & kg/day) (6)   |         |                | 2/y   |       |      |          |        |               |          |                | ļ        |          |
| Endrin<br>(mg/l & kg/day) (6)                                 |         |                | 2/y   |       |      |          |        |               |          |                | _        | _        |
| HCH (mg/1 & kg/day) (6)                                       |         |                | 2/y   |       |      |          |        |               | <u> </u> | <u> </u>       | <u> </u> | _        |
| PCBs (mg/l & kg/day) (6)                                      |         |                | 2/y   |       |      |          |        |               |          |                | <u> </u> | _        |
| Toxaphene (mg/1 & kg/day) (6)                                 |         |                | 2/5   |       |      |          |        |               |          |                |          | _        |
| Radioactivity (pCi/l) (6                                      |         |                | 2/5   | END I |      |          |        |               |          |                |          |          |

#### TYPES OF SAMPLES

G = grab sample

C-24 = composite sample - 24-hour

Cont = continuous sampling

0 = observation

# TYPES OF STATIONS

A = treatment facility influent stations

E = waste effluent stations

C = receiving water stations
P = treatment facilities perimeter stations

OV = overflows and bypasses
Misc. Obsv. = Miscellaneous Observations
Sec. Trt. Bypass = Flow bypassed around secondary trt. sys.

# FREQUENCY OF SAMPLING

2/H = twice per hour E = each occurence 2/W = 2 days per week 5/W = 5 days per week 2/M = 2 days per month H = once each hour D = once each day W = once each week 2/y = once in March and once in September M = once each month

Q = quarterly, once in March, June, Sept. and December

2H = every 2 hours 20 = every 2 days 2W = every 2 weeks 2M = every 2 months Cont = continuous

#### TABLE I FOOTNOTES

- (1) During any time when bypassing occurs from any treatment unit(s) in the treatment facilities, or to the emergency outfall, the monitoring program for effluent discharged from the treatment plant shall include the following in addition to the above schedule for sampling, measurement and analyses:
  - a. Composite samples on an hourly basis for the duration of the bypass event for BOD and Total Suspended Solids analyses;
  - b. Grab samples at least daily for the duration of the bypass event for Total Coliform, Settleable Matter and Oil & Grease analyses; and
  - c. Continuous monitoring of bypassed flow.
  - d. When discharging through the emergency outfall (near-shore storm drain outfall), sampling and analysis for Total and Fecal Coliforms shall be conducted daily at Receiving Water Sampling Stations C-1 through C-4 and at a point mid-way along the municipal fishing pier.
- (2) Chlorine Residual concentrations shall be monitored both prior to and following dechlorination.
- (3) Effluent coliform monitoring may be substituted for bimonthly receiving water monitoring, as specified in Effluent Limitation B.5.
- (4) Fish Toxicity shall be determined using 96-hour fish bioassays using 24-hour composite samples representative of the discharged effluent, and one of the following test species: three-spined stickleback, rainbow trout or fathead minnow. Effluent used for fish bioassays must be dechlorinated prior to testing.
- (5) Ammonia Nitrogen shall be tested for on the same composite sample used for the bioassay. The bioassay water shall be tested for pH, Dissolved Oxygen and Temperature at the start of the bioassay and then daily for the duration of the bioassay test (i.e. at 0, 24, 48, 72, and 96 hours from the start of the bioassay test).
- (6) If any of these constituents are found in excess of the permit limits (Effluent Limitation B.4.), then sampling and analysis for the constituents which exceed the permit limits shall be conducted weekly until compliance is demonstrated in two successive samples.
- (7) Daily records shall be kept of the quantity and solids content of dewaterd sludge disposed of, and the location of disposal.